DOCUMENT RESUME

ED 373 845 JC 940 496

AUTHOR	Eaton, Judith S., Ed.
TITLE	Strengthening Transfer through Academic Partnerships.
INSTITUTION	American Council on Education, Washington, DC. National Center for Academic Achievement and Transfer.
PUB DATE	94
NOTE	90p.
AVAILABLE FROM	Publications Department T, American Council on Education, One Dupont Circle, Washington, DC 20036 ($15, postpaid).
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Articulation (Education); Blacks; *College Transfer Students; Community Colleges; Cooperative Programs; Core Curriculum; *Curriculum Development; *Economically Disadvantaged; Educational Change; Educationally Disadvantaged; Grants; Higher Education; Hispanic Americans; *Intercollegiate Cooperation; Minority Groups; *Partnerships in Education; Program Descriptions; Two Year Colleges; Universities
IDENTIFIERS	*National Center for Academic Achievement Transfer

ABSTRACT

The National Center for Academic Achievement and Transfer was established in 1989 as a national project to improve transfer between two- and four-year institutions, especially for low-income, black, and Hispanic students. This volume describes the results of three types of grants awarded by the center to two- and four-year institutions: Core Curriculum Grants ($200,000), awarded for the development of at least 50% of a core curriculum meeting degree requirements at both institutions; Phase II Partnership Grants ($25,000), designed to continue the initial partnership grant program and fund efforts to revitalize faculty relationships, shared pedagogy, joint curriculum development, and general education arrangements; and Supplemental Grants ($10,000), awarded to partnership grant schools requiring additional support to continue their efforts. An evaluation of the grant programs and other facets of the center's work suggested the importance of dialogue between faculty at two- and four-year institutions; partnership between two- and four-year colleges in the development of a core curriculum; institutional support and recognition; opportunities for faculty exchanges and concurrent student enrollment; and realistic expectations of the amount of change possible as a result of a relatively small external grant. The bulk of this report contains detailed descriptions of 4 projects funded by Core Curriculum Grants; 8 Partnership Grants projects; and 15 Supplemental Grant projects. (MAB)

ED 373 845

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Strengthening Transfer Through Academic Partnerships

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
J. Eaton
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Judith S. Eaton, Editor

I 9410 496

American Council on Education

National Center for Academic Achievement and Transfer

2

BEST COPY AVAILABLE

STRENGTHENING TRANSFER THROUGH ACADEMIC PARTNERSHIPS

STRENGTHENING TRANSFER THROUGH ACADEMIC PARTNERSHIPS

Judith S. Eaton, Editor

4

The National Center for Academic Achievement and Transfer of the American Council on Education wishes to thank The Ford Foundation for its generous support. The Center also thanks Kelly Stem, Production Editor, for her good advice and thoughtful assistance in the preparation of this monograph.

© 1994 American Council on Education
Printed in the United States of America

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the Publisher.

American Council on Education
One Dupont Circle, Suite 800
Washington, DC 20036

Additional copies of this publication may be purchased from the American Council on Education for $15.00 postpaid. All orders must be prepaid by money order or check (made payable to the American Council on Education) and sent to:

Publications Department T
American Council on Education
One Dupont Circle
Washington, DC 20036

This publication was produced on Apple Macintosh computers using Aldus PageMaker desktop publishing software.

TABLE OF CONTENTS

Introduction 1

The Partnership Grants: Location and Focus 9

Descriptions of Core Curriculum Grant Projects 13
Houston, Texas 15
Memphis, Tennessee 19
San Antonio, Texas 23
San Francisco, California 29

Descriptions of Phase II Partnership Grant Projects 33
Atlanta, Georgia 35
Corpus Christi, Texas 38
Jacksonville, Florida 40
Richmond, Virginia 42
San Jose, California 45
Shreveport, Louisiana 48
Tucson, Arizona 51
University Park, Illinois 54

Descriptions of Supplemental Grant Projects 57
Atlanta, Georgia 59
Boston, Massachusetts 61
Chicago, Illinois (2) 62, 64
Corpus Christi, Texas 66
Detroit, Michigan 68
El Paso, Texas 70
Memphis, Tennessee 71
Newark, New Jersey 73
New York City, New York (2) 75, 77
Richmond, Virginia 78
San Antonio, Texas 80
San Diego, California 81
San Francisco, California 83
San Jose, California 85
Tucson, Arizona 87

INTRODUCTION

In 1992, the National Center for Academic Achievement and Transfer (NCAAT) published the first report on its national grants program aimed at strengthening transfer. *Faculty and Transfer: Academic Partnerships at Work* described 18 of the two- and four-year partnership grants that were made during Phase I of the program. The monograph also provided recommendations for building partnerships in teaching and learning across institutions in order to help students transfer with greater ease.

The transfer center was established in 1989 as a national project to improve transfer between two- and four-year institutions, especially for low-income, black, and Hispanic students. Funded by the The Ford Foundation and sponsored by the American Council on Education, the center provided approximately $2 million in grants to urban-based institutions with large numbers of low-income, black, and Hispanic students. In addition, the transfer center supported significant research on transfer, publishing studies on topics such as transfer rates, curriculum and transfer, and academic tasks and transfer. The center also developed a national policy statement on transfer that was accompanied by a series of recommendations to the higher education community for meeting the challenge of enhancing the educational mobility of students attending community colleges.

This volume describes the results of the remaining phases of the center's grants program: the Core Curriculum Grants, the Phase II Partnership Grants, and the Supplementary Grant Program. In all, the transfer center awarded 54 grants during its four years of operation.

Grant Expectations: The Academic Model

The transfer center's grants program built upon a strategy for institutional change that came to be described as the "academic model." The academic model focuses on teaching and learning and is based on faculty-led efforts. It goes beyond the traditional articulation agreements and student support activities characteristically used to aid transfer students. The academic model assumes that faculty are central to transfer success. The transfer challenge is described by what needs to be done with courses, programs, and academic expectations to ensure that students move to four-year institutions and earn the baccalaureate. Central to the strategy is academic collaboration among two- and four-year faculty at the depart-

mental, disciplinary, and program levels in the development of curriculum content and expectations for student success. The academic model requires:

- primary focus on curriculum and performance expectations;
- faculty leadership;
- two-year/four-year faculty collaboration;
- administrative leadership and support for faculty-led efforts; and
- systematic tracking of the transfer student population to determine transfer effectiveness.

Grant Programs: Purpose and Intent

Core Curriculum Grants

Core Curriculum Grants of $200,000 were awarded to eligible institutional partnerships that had developed successful collaborative proposals to develop at least 50 percent of a core curriculum to meet degree requirements at both institutions. The curriculum could be either disciplinary or interdisciplinary, but it had to involve at least two subject areas. Grantees had a 22-month period in which to jointly develop these required offerings. They were free to either design new curricula or redesign existing offerings.

Core curriculum grants were awarded to:

- Houston Community Colleges and the University of Houston (Houston)
- Shelby State Community College and Memphis State University (Memphis)
- Palo Alto College/San Antonio College/St. Philips College (Alamo Community College District) and the University of Texas–San Antonio (San Antonio)

- Laney College/Merrit College (Peralta Community College District), Holy Names College, and San Francisco State University (San Francisco)

Phase II Partnership Grants

Phase II Partnership Grants were a continuation of the initial partnership grants program launched by the center in 1990. Six additional partnerships were funded based on the original grant criteria. Two additional grants were awarded (Special Grants) to non-urban institutions.

The Phase II program provided $25,000 to two- and four-year institutions over a 15-month period. The grants were to fund efforts that focused on revitalized faculty relationships, shared pedagogy, joint curriculum development, and general education arrangements. Grantees were to show evidence of change in academic practices, such as revision of courses or teaching strategies across the two institutions. Grantees also were asked to monitor their transfer rates over a multi-year period in order to determine whether these changes had a positive impact on transfer.

The following schools received Phase II grants:

- Atlanta Metropolitan College and Georgia State University (Atlanta)
- Del Mar College and Corpus Christi State University (Corpus Christi)
- Florida Community College at Jacksonville and the University of North Florida (Jacksonville)
- J. Sargeant Reynolds Community College and Virginia Commonwealth University (Richmond)
- San Jose City College/Evergreen Valley College and San Jose State University (San Jose)
- Southern University–Shreveport and Louisiana State University in Shreveport (Shreveport)
- Pima Community College and the University of Arizona (Tucson)
- South Suburban College and Governors State University (University Park, IL)

Supplemental Grants

Supplemental Grants of $10,000 were made available to partnership grant schools that required additional support to continue the work they had begun under the partnership grants program. The funds were offered upon receipt of a brief proposal detailing how the money would be spent. Grantees held conferences, disseminated the results of their partnership work through publications, provided stipends to involve additional faculty in their efforts, and supported speakers to assist in their efforts to change academic practices to strengthen transfer.

Supplemental grants were awarded to participating schools in Atlanta, Baltimore, Boston, Chicago, Corpus Christi, Detroit, El Paso, Houston, Memphis, Newark, New York, Richmond, San Antonio, San Diego, San Francisco, San Jose, and Tucson.

Results of Grant Efforts

Two basic questions must be answered to fully evaluate the results of the various grant programs: Did the grantees complete the work to which they had committed themselves? Did the work have a positive impact on the transfer of low-income, black, and Hispanic students? At this stage, only the first question can be answered. And, as this monograph indicates, almost all partnerships met their objectives.

The answer to the second question requires additional data collection. The center continues to monitor transfer rates at the grantee institutions. However, most grant programs were put into place in 1992. Information about their impact will not be available until transfer activity for fall 1996 has been determined.

To monitor transfer rates, the center worked closely with the Center for the Study of Community Colleges (CSCC) at the University of California, Los Angeles and its Transfer Assembly project. This effort, also funded by The Ford Foundation, has amassed a database of more than 350 community colleges, all of which report the number of students who transfer each year. CSCC defined the transfer population as students who were first-time college attendees, earned at least 12 credits, and, at the end of four years, transferred to a senior institution.

Data have been collected from all grantee institutions since 1990. Of the 26 community college grantees supplying data, 23 provided information for at least some of the years.

Another dimension of the center's work is its important focus on low-income, black, and Hispanic students. The grant programs were developed to assist these students in transferring to four-year institutions. To achieve this goal, the center worked specifically with institutions enrolling large numbers of these students with the intent of altering the environment to enhance transfer. Again, measuring the effectiveness of the center's work will require subsequent transfer rate information.

Core Curriculum Grants

The four core curriculum grants demonstrated that under appropriate conditions, institutions can make significant strides in changing curricula and in enhancing cooperative relationships. The goals of the core grants were ambitious, and the grantees achieved impressive results. All were able to make major changes in courses and requirements that became permanent additions to institutional curricula. Houston focused on changes at the course level; Memphis chose general education; San Antonio attended to interdisciplinary education; and San Francisco concentrated on science and mathematics.

The work of these core partnerships provides four striking models of curriculum change that may be of use to any number of institutions seeking to improve transfer.

Project participants offer similar suggestions for either initiating or sustaining the core curriculum efforts: make specific institutional provisions to support faculty; ensure ongoing administrative support and financial resources; provide for faculty development; and continue to make the cooperative arrangement with the partnership institution a priority.

Phase II Partnership Grants

The second phase of Partnership Grants offers lessons quite similar to those of Phase I. Initiating interinstitutional curricular efforts takes time and commitment, but it can be done. Faculty and administrators continue to be attentive to the need for curricular change and to the importance of the transfer function.

In many ways, both phases of the Partnership Grants confirm that these modest grants have played an important role in creating awareness about transfer, the role of faculty and curriculum, and the relationship of curricular-driven initiatives to other institutional efforts to enhance transfer, such as student support and articulation.

Supplemental Grants

The Supplemental Grants primarily described ways in which institutions can disseminate the results of transfer-related efforts. These include conferences, informal meetings with faculty and administrators at other institutions, exchange of materials, and presentations at regional, state, or national meetings.

Recommendations

The transfer center underwent a comprehensive external evaluation of all grant programs, those in this monograph and those described in the 1992 grant publication *Faculty and Transfer*. This 1993–94 assessment of the center's work produced a number of recommendations that are of value to institutions seeking to strengthen transfer by focusing on change in academic practice. In many ways, the recommendations reaffirm those offered in *Faculty and Transfer*, as well as the suggestions made by the grantees themselves. The evaluation of the transfer center was carried out by the California Higher Education Policy Center.

(1) *Beginning a dialogue between faculty at two-year and four-year institutions is an important first step toward faculty involvement in the transfer process.*
It is important to start slowly, to introduce faculty to one another, and to begin to break down the stereotypes that the faculty and institutions often have of one another.

(2) *Development of a core curriculum should be a joint effort on the part of institutions that share the responsibility for providing students with general education.*
With the potential for greater numbers of students beginning their college careers at two-year colleges, general education increasingly will be shared by two- and four-year institutions. Thus, four-year colleges and universities undergoing a study of their core curricula should involve local community colleges in their discussions to ensure that any curricular changes meet common goals and expectations for student learning.

(3) *Institutional support and recognition are necessary if faculty are to be significantly involved in the transfer process on a widespread level.*
Currently, there are relatively few incentives (and many disincentives) for faculty—particularly university faculty—to involve themselves in

transfer efforts. If university faculty are to become engaged in the transfer process on a widespread basis, the institution will have to make it clear that this is important. Stipends provided through the NCAAT grants helped somewhat in changing the perception that transfer was an undervalued activity, but additional incentives or rewards must be identified. Several faculty suggested that it will be especially important to encourage new hires to be involved in a dialogue with community college faculty, and to reward them accordingly.

(4) *Opportunities for faculty exchanges and concurrent enrollment of students should be encouraged, and administrative barriers to each should be lifted.* While institutional support and committed faculty can help institutions overcome their cultural differences, additional means must be found to address this collision. Two suggestions made by those involved in the project are faculty exchanges and joint/concurrent enrollment. Through faculty exchanges, faculty at the four-year institution would have the opportunity to teach a course or two at the community college, while community college faculty would have the opportunity to teach at the four-year campus. These "exchanges" would provide faculty with a first-hand view of the student population and college culture at their partner institution, and, hopefully, would help them better understand the students and expectations at the other campus. Concurrent enrollment opportunities give community college students a chance to experience the four-year institution, to gradually acclimate themselves to the changed environment.

(5) *Future efforts at implementing this type of program must begin with realistic expectations of the amount of institutional change that can occur as the result of a relatively small external grant.*
The most successful projects began with specific objectives and a definite plan for meeting those objectives. Projects that had the most difficulty promised significant institutional changes but had only vague plans for reaching their goals.

(6) *Assessment must become a key component of the transfer process.*
Rather than focus on standardizing course content or approaches to teaching, institutions should develop mechanisms for assessing student learning and for determining comparable student outcomes for courses taught at both the community college and the four-year institution.

(7) *Student tracking systems are necessary for faculty and institutions to understand how students progress through the system.*
Understanding where students go when they transfer and how they perform once they leave the community college is critical to enhancing the transfer process. If we have nothing more than anecdotal evidence about what is happening now, we will be unable to understand how well the curriculum fits together, or to identify where revisions should be made.

(8) *Academic activities are central, but they cannot be disconnected from the work of student services, transfer centers, or admissions and financial aid offices.*
The NCAAT project purposely focused on academic activities and the faculty role, an area that previously had received little attention in the transfer process. Future efforts to implement the academic model should integrate the other aspects of the transfer process in order to utilize the important contributions of each of the players.

(9) *Policy makers must begin to recognize the importance of the different components of the transfer function: academic, administrative, and student services.*
Policy mechanisms have, in the past, focused primarily on the student services and administrative sides of transfer. While the mechanisms will be different, policy makers should begin to address and recognize the faculty role in transfer, as well. Incentives that say to the institution, "This is important," such as seed money for projects similar to the NCAAT partnerships, may be one way for states to encourage this type of activity.

Looking Ahead

The transfer center sustained an ambitious agenda. We hope that the results of its efforts will be of value to two- and four-year faculty and administrators as they continue to address ways to strengthen higher education and ensure academic success for students and the institutions they attend.

Judith S. Eaton
Vice President and Director
National Center for Academic Achievement and Transfer
American Council on Education

The Core Curriculum Grants: Location and Focus

City	Partnership Institutions	Project Focus
Houston	Houston Community College University of Houston	Collaboration in English, history, and mathematics: faculty teams involving both institutions developed and implemented three new core curriculum courses and applied classroom assessment techniques to create a common level of competency at both institutions.
Memphis	Shelby State Community College Memphis State University	Ensure consistency and similarity in the general education at both institutions and enrich the general education curriculum by emphasizing critical thinking, interdisciplinary learning, and sociocultural differences.
San Antonio	Alamo Community College District University of Texas at San Antonio (UTSA)	Expand and further coordinate the interdisciplinary student program to replace the elementary education degree at UTSA with the Alamo District; per state mandate, undertake a review of general education requirements at both institutions, resulting in a new core curriculum at the university into which all new Alamo District core curricula transfer.
San Francisco	Peralta Community College District (Laney College and Merritt College) Holy Names College San Francisco State University	Focus on math and science and the collaborative design of courses, team teaching, and new techniques in pedagogy.

Partnership Grants—Phase II: Location and Focus

City	Partnership Institutions	Project Focus
Atlanta	Atlanta Metropolitan College Georgia State University	Examine college algebra and precalculus mathematics courses at each institution through content analysis of textbooks and syllabi, survey of faculty and students, and observation of classroom instruction to determine course demands and teaching methods.
Corpus Christi	Del Mar College Corpus Christi State University	Faculty exchange and course linking in accounting, creative writing, English literature, ethnic studies/American history, modern algebra/calculus, and stratigraphy/historical geography.
Jacksonville*	Florida Community College at Jacksonville University of North Florida	Establish interinstitutional faculty committee to collaborate in review of course syllabi, teaching methods, course expectations, and assessment in English, mathematics, and science.
Richmond	J. Sargeant Reynolds Community College Virginia Commonwealth University	Establish a collaborative mathematics faculty project involving faculty exchange, joint curriculum development, improved placement of transfer students, and a forum for continued exchange of ideas.

Partnership Grants—Phase II: Location and Focus (continued)

City	Partnership Institutions	Project Focus
San Jose	San Jose City College Evergreen Valley College San Jose State University	Focus on English and mathematics courses to develop and implement shared exit standards; assess the performance of community college transfer students; track black, Hispanic, and low-income students; and develop mechanisms for expansion.
Shreveport	Southern University–Shreveport Louisiana State University in Shreveport	Interinstitutional faculty collaboration in curriculum revision, delivery of instruction, faculty development, and student advising in education, business, mathematics, English, communications, and sociology.
Tucson	Pima Community College District /University of Arizona	Develop "Partnership to Aid and Retain Transfer Students" (P.A.R.T.S.), an interinstitutional project to modify curricula, build faculty mentoring, strengthen support services, and develop a "transfer strategies" course.
University Park (IL)*	South Suburban College Governors University	Attention to mathematics courses to reduce "math anxiety" by enhancing faculty instructional methods and developing study skills modules for students.

* The transfer center funded two partnerships that were not located in major urban areas. The Florida partnership focuses on a regional university–community college connection, while the Illinois partnership is a model for upper-division–community college collaboration.

DESCRIPTIONS OF CORE CURRICULUM GRANT PROJECTS

Houston

Memphis

San Antonio

San Francisco

HOUSTON, TEXAS

Houston Community College (HCC) and the University of Houston (UH)

Houston Community College (HCC) and the University of Houston (UH) were awarded a core curriculum grant to continue their efforts to build interinstitutional collaboration among English, history, and mathematics faculty and to support their efforts to implement assessment techniques in freshman composition, U.S. history, and college algebra courses. In addition, the grant supported the development of equivalent courses in English, history, and math, as well as common instructional methods for each of the courses.

Objectives

- To create equivalent courses at HCC and UH to provide students with a common level of competency in order to positively affect their long-term learning outcomes.
- To design new courses in English, history, and mathematics, taking into account students' cultural differences.
- To integrate these courses into both institutions' core curricula.
- To encourage HCC and UH faculty to focus on teaching and learning styles in order to develop instructional strategies—e.g., collaborative learning—appropriate to targeted student populations.
- To develop tracking mechanisms at both HCC and UH in order to monitor black and Hispanic students' academic achievement and success.

Impact

During the grant period, project participants designed core curriculum courses in multicultural literature, world civilizations, and contemporary mathematics. These courses became part of the core curricula at both schools during the second year of the grant project and have been

integrated into the academic curricula at both HCC and UH. In addition, one of the two new history courses was team-taught via closed-circuit television at several HCC and UH campuses during the spring 1993 semester.

Developing the multicultural literature course

The English faculty team began its collaboration by sharing student essays and methods of teaching freshman composition courses. HCC student essays were interspersed with UH English exit exams, and faculty from both institutions graded the essays and compared similarities and differences in teaching and grading methods, as well as in student preparedness.

Team members from both HCC and UH collaborated in the design of the multicultural literature course, "Introduction to Multicultural Literature," deliberately leaving the course format to the discretion of individual instructors. For instance, while some instructors chose to teach the course thematically across cultures, others taught it in distinct cultural units. Course objectives included developing students' ability to analyze literature through reading, discussion, and writing; identifying cultural elements as expressed through various genres; and recognizing the ways in which different cultures approach similar problems or situations, as well as identifying tensions that arise when cultures clash with one another.

Students enrolled in "Introduction to Multicultural Literature" were required to write five essays, and instructors were encouraged to incorporate quizzes and require students to keep journals and/or write a research paper. Instructors met frequently during the semester to compare their experiences and share successful teaching strategies. Analysis of student grades and evaluations at the end of each semester revealed that student performance at all participating institutions was quite similar, regardless of institutional type, and that overall, students were highly motivated and interested in the course's content.

The interinstitutional English team also sponsored a lecture entitled "Notes on Teaching Multicultural Studies," which challenged team members to develop a group of principles through which they and their students could come to embrace both the sameness and differences among diverse cultures.

Developing the world civilizations courses

The interinstitutional history team ultimately succeeded in creating and teaching "The Origins and Development of World Civilizations" and

"Modern World Civilizations: The West and the World." Goals for both courses included developing students' writing, reading, and analytical skills; promoting historical and cultural literacy; fostering an understanding of the interaction of world civilizations; and helping students comprehend the interplay of change and continuity.

One UH history instructor was particularly instrumental in developing "Modern World Civilizations: The West and the World" and team-taught it with an HCC instructor during the spring 1993 semester. The course was taught via closed-circuit television and broadcast to three HCC System campuses as well as three UH System campuses, in addition to being presented in the original "live" classroom. During the fall 1993 semester, both courses were taught at all six colleges within the HCC System and the University of Houston.

Student evaluations indicate that the courses were challenging and effective in enhancing students' understanding of the modern world. Critical thinking and other higher order skills were fostered through classroom assessments and evaluation methods. Students' grades indicated a slight variation between community college and senior institution students' performance, but the variation was not nearly as great as instructors had expected. Attrition rates for the courses were higher than institutional averages during the first semester the courses were offered, but instructors attribute that to insufficient information; many students did not realize they had registered for a closed-circuit broadcast course.

Developing the "Contemporary Mathematics" course

The interinstitutional mathematics faculty team collaborated effectively almost from the start of the grant project. Participants met regularly throughout the two years of the project to develop the course and monitor its effectiveness. Course topics included logarithmic functions, geometry, probability, statistics, and finance. Unlike other mathematics courses, "Contemporary Mathematics" was designed to include a writing component, requiring students to keep journals, explain their problem-solving techniques, and write formal papers on mathematical subjects. Faculty also distributed surveys to monitor students' progress.

Faculty participants found that it was easier to implement the course at UH than at HCC. UH students were better informed about the applicability of course credit to the core curriculum mathematics requirement, while HCC students were not certain that the course credit would transfer. Nevertheless, course evaluations indicated that students at both HCC and UH were pleased with the course's content and structure.

Many were surprised by the writing component and other requirements that forced them to participate more actively, but overall, students were pleased with this "new and different" approach to math.

Grade distributions between HCC and UH students for the math course varied widely, with HCC students scoring more than one full point over UH students. The variation may have been the result of UH students not having textbooks (due to an ordering mistake made by the bookstore) or of the different instructional strategies utilized.

In general, the mathematics faculty collaboration was highly beneficial. Team members worked closely together, meeting on a regular basis and expanding their conversations to mathematics courses other than those directly related to the core curriculum grant.

Recommendations

- Ensure that effective departmental communication mechanisms are in place in order to facilitate participant recruitment efforts and inter-institutional collaboration.

- Work to eliminate technical difficulties before relying on new technologies for course delivery.

- Enlist the support of senior administrators in order to facilitate inter-institutional faculty collaboration and ensure participating institutions' commitment to project objectives.

- Ensure that students receive clear information about course applicability to core curriculum requirements and course credit transferability.

MEMPHIS, TENNESSEE

Shelby State Community College (SSCC) and Memphis State University (MSU)

The purpose of the Bridging Curricula project was to ensure consistency and similarity in the general education cores at both Shelby State Community College and Memphis State University in order to reduce the level of difference experienced by transfer students and to enrich the general education curriculum by emphasizing critical thinking, interdisciplinary learning, and socio-cultural differences. The ultimate goal was to improve the transfer process between SSCC and MSU so that more SSCC students transfer to MSU, succeed in upper-division courses, and earn a bachelor's degree in a reasonable period of time. In order to achieve the project's purpose, the following objectives were adopted:

- To review and revise the general education cores at both SSCC and MSU.
- To develop new courses that meet both institutions' general education requirements and to include them in the core curricula at both SSCC and MSU.
- To improve SSCC transfer students' progression and completion rates by enhancing faculty members' understanding of the techniques required to encourage students of differing backgrounds to transfer.
- To complete the development of a student tracking system that compares SSCC transfer and "native" MSU students' performance, progression, and completion rates.

Impact

Reviewing and revising general education cores

Because of the lack of conformity and cohesiveness in the basic assumptions and expected results between SSCC and MSU's core curricula, project administrators felt it was necessary (1) to establish a general education core at SSCC utilizing the services of MSU's former General

Education Program director and (2) to involve SSCC faculty in MSU's general education course evaluation process.

Twelve faculty members representing all transfer core areas were appointed to the SSCC General Education Committee, which was directed to develop and implement a general education program within two years. The former director of MSU's General Education Program contributed to the committee's success by helping committee members understand the choices MSU had made and by acknowledging both the strengths and weaknesses of MSU's program. Ultimately, SSCC General Education faculty developed a set of goals and guidelines that was approved through the curriculum process and adopted as policy for the 1993–94 academic year.

SSCC faculty members were provided the documents and background information necessary to understand the MSU general education course evaluation process. Both institutions appointed assessment teams, but because MSU's evaluation process is being phased in gradually, results as of yet are inconclusive.

Developing new courses

Convinced of the need to provide students with a core experience of common learning—including proficiency in written and spoken English, critical thinking skills, a historical/international perspective, basic knowledge of science and technology, and an appreciation of the fine arts—project administrators established a General Education Academy charged with developing and/or revising courses in several disciplines.

Twenty-four SSCC and MSU faculty members representing each of the disciplines undergoing course revision were appointed to the General Education Academy, which was charged with examining and articulating both institutions' introductory courses. Two groups worked on interdisciplinary courses; the others worked within their disciplines.

Philosophy, history, English, art, and classics faculty designed a new interdisciplinary course to "bridge" a problem area for transfer students; credited at SSCC as a literature course, it meets MSU's Historical/Philosophical Heritage II requirement. Sociology and home economics faculty designed an SSCC course comparable to MSU's "Global Family" course.

The General Education Academy raised the core requirement from 32 to 50 hours, revising or developing courses in speech, English, history, mathematics, science, and the social sciences. Matrixes were used to

determine the degrees of congruence and difference between the institutions' courses; most differences were the result of the institutions' mission statements. Nevertheless, the degrees of congruence were sufficient to guarantee successful articulation and transfer.

Improving transfer students' progression and completion rates

Interinstitutional dialogue and planning enhance instructors' awareness of student learning processes and teaching techniques and can facilitate increased progression and completion rates among students. Thus, project administrators provided a series of faculty development activities for General Education Academy members, as well as opportunities for interinstitutional class observations and team teaching.

Faculty development activities included seminars on "More Effective Teaching," "Writing across the Curriculum," "Critical Thinking in the Classroom," "Fostering Transfer and Achievement" (a one-day regional conference), "Collaborative Learning," "Education as Transformation," "Active Learning," and "Academic Achievement and Transfer" (a one and one-half day regional conference). Regular meetings of the academy also fostered faculty development.

While attendance at faculty development activities was consistently high (despite many of them being held on Friday afternoons and Saturdays), very few faculty participated in joint classroom or team-teaching activities. Logistics of travel and differences in academic calendars and class periods proved problematic, as did credit for teaching loads: faculty were required to team-teach two courses to earn full credit for just one.

Developing a student tracking system

Because empirical data on the progress and success of transfer students are necessary for evaluating the success of curriculum revision, project administrators developed a student tracking program to be used at MSU.

The student tracking program was developed and has been used by academy members. While the system is not designed to track and compare transfer students with native MSU students, users believe it can be modified to do so.

MSU continued to monitor the 50 SSCC students identified in 1991 as potential transfer students, but the data thus far are inconclusive. Several students appear to be drop-ins and drop-outs.

Concluding thoughts

Overall, both the project directors and the academy members believe the collaboration was successful. Faculty from both institutions acquired a new respect for and appreciation of their colleagues' work; this should strengthen the curricular bridge they developed. The dialogue fostered by regular meetings also contributed to the development of positive interinstitutional relationships and dispelled many of the suspicions participating faculty initially had.

Recommendations

- Plan well in advance in order to ensure the successful implementation of faculty exchanges and team-teaching initiatives.
- Ensure that faculty development activities are made available to faculty participating in team-teaching efforts.
- Conduct basic research and develop an assessment process in order to evaluate project activities and outcomes as they relate to both faculty and students. Be sure to involve institutional research and enrollment management departments, in addition to academic affairs.
- Establish mechanisms to ensure continuing joint faculty development and interinstitutional collaborative activities.
- Provide support for faculty travel to conferences and other events that contribute to interinstitutional collaboration.

SAN ANTONIO, TEXAS

Alamo Community College District (ACCD) and The University of Texas at San Antonio (UTSA)

The San Antonio Core Curriculum Project (SACCP) was undertaken in response to a series of events, including the establishment of an Interdisciplinary Studies (IDS) degree program that took the place of the university's elementary education program, and the ensuing need to coordinate it with courses offered by the three community colleges in San Antonio; concurrent state-mandated reviews of general education requirements at the Alamo Community College District and The University of Texas at San Antonio, which resulted in a new university core curriculum into which all community college core curriculum courses transferred; increased recognition of the need to facilitate student transfer; and the negotiation of comprehensive articulation agreements between ACCD and UTSA.

Objectives

Project goals were divided into two initiatives: the "Faculty and Core Development Initiative" and the "Student Retention Initiative." Specifically, the goals included:

Faculty and Core Development Initiative

- Expanding the Interdisciplinary Studies degree program by teaching IDS courses at all three ACCD institutions and by jointly developing new IDS courses.

- Developing and implementing a revised core curriculum at UTSA on the basis of interinstitutional faculty teams' recommendations.

- Involving faculty from participating institutions in interinstitutional faculty development projects.

- Conducting three project conferences, as well as several meetings and workshops, devoted to project objectives.

- Evaluating faculty participation in core curriculum development projects.

Student Retention Initiative

- Improving IDS students' transfer experiences by enhancing IDS advising, tutoring, and assessment in order to increase students' retention and program completion rates at UTSA.

As the objectives listed above were met, it became clear that project administrators would be able to undertake several additional objectives, expanding the core curriculum project into related areas. Additional objectives included:

- Joint development of a curriculum related to the UTSA core curriculum.

- The organization and implementation of faculty development efforts in each of the "domains" of the core curriculum.

- Establishment of a continuing system of interinstitutional liaison and cooperation on curriculum and transfer issues, to include advisors, counselors, and admissions personnel.

- Sponsorship of a one-day conference with local secondary school personnel to develop a program to involve teachers in core curriculum development and implementation.

- Investigation of the feasibility of using a computer-based tracking system for transfer students.

Impact

The IDS program has been expanded at the university. Slightly fewer than 1,500 majors are offered in the program at UTSA, and 31 sections of IDS courses were offered during the fall 1993 semester. Each of the three community colleges has an IDS coordinator, offers IDS courses, and encourages faculty to take part in IDS development activities. An ongoing consultation program also was established for faculty teaching lower level IDS courses at all four institutions. One of the key IDS

courses—"Modes of Inquiry Across the Disciplines"—was reconfigured into a lower division course so it could be taught at ACCD institutions. An interdisciplinary IDS course in the arts was developed at San Antonio College (SAC) with support from SACCP and will count toward the UTSA core requirements, as well as the IDS degree.

Core curriculum development

At the initial SACCP conference, held in fall 1991, participants formed six working groups—one for each of the major domains of the core curriculum (science, technology, and mathematics; society and culture; literature, the arts, and language; interdisciplinary studies), as well as one each for the rhetoric and core foundations areas. Participants were paid stipends for both 1991–92 and 1992–93. The groups reviewed and recommended modifications to the core curriculum objectives that had been developed by the UTSA Core Curriculum Task Force and suggested specific courses to be included in the core. The UTSA core was structured so that all ACCD core curriculum courses transfer, and an ACCD representative was made a permanent member of the UTSA Core Curriculum Committee.

Grant participants accomplished several of the "additional" objectives they set: A concise statement of the UTSA Core Curriculum was prepared and circulated; existing ACCD and UTSA courses were reviewed by the UTSA Core Curriculum Committee for inclusion in the core; and a substantial project for developing new core courses was undertaken.

The success of the course development project varied according to domain. The Domain I committee (science, technology, and mathematics) incorporated a one-hour laboratory requirement into the ACCD introductory biology course in order to ensure its transferability to the UTSA core curriculum, and it also attempted to develop computer-assisted instruction in UTSA geology, physics, and biology teaching laboratories in order to make a laboratory requirement possible. A logic requirement had to be eliminated from the 1994–96 core for financial reasons.

Domain II committee members (society and culture) focused on state-mandated history and politics courses. They held a series of workshops, and participating faculty were paid a stipend upon submission of a substantially revised syllabus that incorporated agreed upon objectives. An ethics requirement had to be eliminated from the 1994–96 core for

financial reasons, but several committee members have designed a nontraditional ethics course currently being evaluated for possible inclusion in the core.

Language faculty worked as an autonomous subcommittee under the auspices of the Domain III committee (literature, the arts, and language) and focused on faculty development; they also held several workshops that addressed the appropriate content of college-level language courses. The Domain III committee began to develop computer-based core music courses for UTSA and an interdisciplinary IDS arts course for SAC.

The most significant joint activities of the Domain IV committee (interdisciplinary studies) pertained to the IDS program. Faculty teaching IDS courses at all four participating institutions revised several of the courses in order to make them transferable to the core, and held several workshops that addressed IDS course content and teaching methods.

The "foundations" working group developed lists of skills and knowledge participating institutions expect new students to have and discussed methods of evaluating students' possession of those skills and knowledge. A process for considering changes to the ACCD core curriculum has not yet been developed.

The "rhetoric" working group revised the English composition sequences at ACCD institutions in order to make them correspond to the new UTSA rhetoric sequence (itself the product of the 1991–92 SACCP working group). The Palo Alto College and St. Philip's College sequences are now essentially identical to UTSA's, and SAC's are sufficiently similar to guarantee their eventual acceptance at UTSA.

Faculty development

Several ongoing faculty development projects were established, most of which consisted of the workshops and meetings attended by the domain committees. The projects focused primarily on the teaching of interdisciplinary courses, the sharing of techniques, and discussion of ways in which the objectives of core courses can be attained given the different classroom environments at community colleges and universities. Two general conferences were held at which outside presenters discussed the use of computer technology in the classroom. Several project participants also attended national meetings on core curricula, interdisciplinary teaching, and academic computer technology.

BEST COPY AVAILABLE

Three conferences were held in addition to the regular workshops, meetings, and general conferences. The first, held in fall 1991, was devoted to defining the objectives of the project, establishing the project's organization, and planning. The second conference, held in May 1992, was attended by ACCD and UTSA faculty and administrators, representatives from the University of Texas El Paso/El Paso Community College and the Corpus Christi State University/Del Mar College partnerships, Southern Methodist University, and the Texas Higher Education Coordinating Board. The meeting focused on the teaching of core and interdisciplinary courses and planning. The final conference, held in May 1993, included discussions of the "lessons learned" during the project period and planning for future collaborative efforts.

In March 1993, project participants invited San Antonio public school teachers and administrators to a meeting at which they developed a series of proposals for joint college/school activities to publicize the new college core curricula and to encourage college/school collaboration in the areas of curriculum and faculty development. The two primary activities will be a broad-based community campaign to acquaint high school students and their parents with the importance of taking appropriate college preparatory courses and the establishment of programs to encourage collaboration and the exchange of ideas among high school teachers and college faculty members.

Student retention

The IDS student retention initiative was carried out as planned. An IDS counselor was appointed at UTSA. The counseling appeared to be highly effective, as the number of requests for waivers of requirements on the basis of incorrect advising decreased by approximately 75 percent. Grant funds also were used to provide tutoring services in large IDS courses at UTSA.

One of the most important outcomes of SACCP has been a series of agreements among participating institutions to foster continuous contact and liaison with regard to transfer, curricular, and faculty development issues. A plan to reorganize the SACCP executive committee and make it a permanent liaison body was presented to the presidents of the four institutions. Several private colleges in the area are likely to join the body, which eventually may be made a part of the Higher Education Consortium of San Antonio. Admissions personnel, advisors, and counse-

lors at SACCP institutions plan to meet quarterly to discuss transfer and articulation issues. Finally, a faculty exchange program between the community colleges and UTSA has been proposed and agreed upon, though it still lacks financial support.

The overwhelming consensus among SACCP participants is that the project has been a success. It achieved all of its initial objectives, as well as several of the "additional" objectives. Given that many of the participating institutions ignored and were suspicious of one another only a few years ago, the efforts delineated above amount to a remarkable change—a change that SACCP participants hope will become permanent.

Recommendations

- Ensure that release time is made available to participants in order to ensure that administrative details are addressed.

- Involve individuals from other institutions—especially local community colleges—in efforts to redesign core curricula.

- Cultivate a collegial atmosphere among project participants by distributing tasks evenly.

- Encourage the team-teaching of both discipline-specific and interdisciplinary courses.

SAN FRANCISCO, CALIFORNIA

Peralta Community College District (PCCD) (including Laney College [LC] and Merritt College [MC]), Holy Names College (HNC), and San Francisco State University (SFSU)

The core curriculum grant to the Peralta Community College District (PCCD), Holy Names College (HNC), and San Francisco State University (SFSU) was intended to support the efforts of the "Bay Area Partnership Transfer/Education Consortium for Underrepresented Minorities" (BAPTECUM) to improve black and Hispanic community college students' educational experiences in science and mathematics and to thereby increase their transfer rates. In support of this goal, the following objectives were developed:

Objectives

- To team-teach collaboratively designed core curriculum courses.
- To establish ongoing interinstitutional dialogue about curriculum revision and teaching and learning styles by convening discipline-specific task forces to develop uniform expectations; coordinate syllabi, academic standards, evaluation methods, and pedagogies; and standardize and integrate curricula in designated majors.
- To help faculty members improve their teaching skills by integrating "Faculty Design Workshops" into task force meetings and highlighting innovative teaching methods, including computer-assisted instruction and cross-discipline collaboration.
- To develop and publicize discipline-specific transfer programs through brochures and informational meetings for faculty.
- To better coordinate student support services, including study groups, academic counseling, and tutoring.

Impact

Team-teaching core curriculum courses

During the 1992–93 academic year, faculty continued to develop and team-teach the first BAPTECUM bridge course, "Scientific Inquiry." Faculty also developed two innovative calculus courses, team-taught by a physics professor and a mathematics instructor from two partnership institutions. Three instructors from Holy Names (HNC) and Laney (LC) colleges developed and team-taught an innovative biology course, which included historical and multicultural perspectives, and faculty members from HNC, LC, and SFSU developed a sociology course entitled "Social Science and Ethnic Minorities: Significant Studies and Social Policy." The course was team-taught at LC in spring 1994.

Establishing ongoing interinstitutional dialogue

Approximately 40 meetings of program staff and faculty from participating institutions were held during the three-year core curriculum grant period, though some meetings involved as few as two people. Ten meetings focused specifically on curricular and pedagogy issues and the development of guidelines for all BAPTECUM courses. Guidelines eventually adopted by meeting participants included the use of interdisciplinary approaches; the treatment of topics in historical perspective and in relation to social issues; and the incorporation of small-group learning, writing across the curriculum, computer-assisted instruction, and multimedia.

Other meetings were discipline-based and included follow-up and evaluation efforts. Faculty members shared successes and problems in all of the team-taught courses and had the opportunity to share personal insights and suggestions. The regular interinstitutional meetings of calculus faculty members eventually led to the formation of a consortium involving PCCD, City College of San Francisco, California State University–Hayward, and SFSU.

Enhancing teaching skills

BAPTECUM sponsored several workshops that addressed topics related to instruction—specifically with regard to minority students. Instructional techniques addressed in the workshops included critical thinking approaches, small group learning, writing across the curriculum, and computer-assisted instruction. The workshops were particularly effective in changing calculus faculty members' instructional methods—in part

because several of the workshops focused on pedagogies for teaching calculus.

Two LC instructors—one in English and one in science—worked with a consultant to design a multi-level, Hypercard-driven, interactive biology tutorial intended to enhance student success in science.

Publicizing transfer programs

The LC BAPTECUM coordinator, who also serves as director of the Laney Transfer Center, was instrumental in publicizing transfer programs and arranging for four-year college representatives to speak at the LC campus. Overall, several hundred brochures and fliers were developed and disseminated through transfer and counseling centers, math and science classes, and student unions and other public areas on the community college campuses. Articles were printed in campus papers and a transfer center newsletter, and orientation sessions were held at the community colleges. The number of student inquiries generated by the brochures and fliers was very low (40).

Coordinating student support services

Student support services—tutoring, especially—were made available to all BAPTECUM students. Laney, Merritt, and Holy Names students served as tutors, and LC retained a coordinator to establish study groups. Despite these efforts, the drop-out rates in BAPTECUM courses were as follows: 40 percent for Calculus I, 15 percent for Calculus II, 25 percent for Biology, and 27 percent for Scientific Inquiry.

Conclusions

Because most BAPTECUM courses were offered for the first time during the spring 1993 semester, it is too soon to determine whether they will positively affect the transfer rates of underrepresented students. Some minority enrollments in some BAPTECUM sections were higher than the norm for similar courses, but other minority enrollments were lower than the norm.

The BAPTECUM core curriculum grant project met with mixed success in terms of realizing its objectives. The collaborative development of team-taught courses met with the most success, and interinstitutional meetings and workshops appear to have been at least partially effective. Further efforts need to be made with regard to publicizing the program and strengthening student support services. However, while the success

of the BAPTECUM program was limited, faculty and staff participants learned a great deal.

Recommendations

- Provide opportunities for faculty involved in team-teaching efforts to develop a jointly held philosophy of team-teaching and an understanding of each partner's responsibilities.

- Provide intensive and continuous training to help faculty members incorporate new ideas and strategies into their teaching methodologies.

- Retain an instructional designer to consult with faculty in the development of multimedia for classroom or tutorial use.

- Install technologies (such as telephone systems capable of voice and data transmission) to encourage faculty communication not only among partner institutions, but nationwide.

DESCRIPTIONS OF PHASE II PARTNERSHIP GRANT PROJECTS

Atlanta

Corpus Christi

*Jacksonville**

Richmond

San Jose

Shreveport

Tucson

*University Park (IL)**

* *Specially funded partnerships*

ATLANTA, GEORGIA

Atlanta Metropolitan College (AMC) and Georgia State University (GSU)

The Atlanta Metropolitan College/Georgia State University partnership grant project was an 18-month collaborative effort to study ways to improve the transfer of students from AMC, a predominantly black institution, to GSU—particularly in the area of mathematics. Project administrators also hoped to improve intrainstitutional transfer from developmental mathematics courses to college-level math courses. Thus, the initial focus of the grant was on the last developmental math course and the first regular math course at each institution (a total of four courses). The grant also supported the initial planning and development of an instrument for a larger project addressing student articulation.

Objectives

Phase I

- To analyze the content of the four identified math courses.

- To develop a classroom observation instrument as well as a student and faculty survey for the developmental studies mathematics and college algebra courses at both institutions.

Phase II

- To develop a "Topics in Algebra Inventory" as an outgrowth of the college algebra content study undertaken in Phase I.

- To disseminate project activities and results to faculty at both institutions.

Phase III (To be funded by a GTE Focus Grant.)

- To extend the two areas of study—content analysis and course observation/interviews—to the next level of math courses (pre-calculus) at both institutions.

Impact

A committee of faculty members from both institutions met to determine the scope of the project and to set a timeline. The committee divided itself into two subcommittees: one for content analysis and the other for instrument development.

Content analysis

Beginning in fall 1991, the content analysis subcommittee met to analyze the content of both institutions' terminal developmental courses and their initial college-credit algebra courses. The group examined course descriptions, syllabi, textbooks, and exams by topic and by "depth of coverage." Faculty participants ultimately determined that neither AMC's and GSU's developmental courses nor their introductory algebra courses could be adequately compared using narrative descriptions, so they devised a numerical scale for course content comparison. The same scale was used later in comparing the institutions' pre-calculus courses.

Ultimately, faculty participants determined that differences in the sequencing of instruction at the two institutions might pose a problem for students seeking to transfer to GSU. Hence, they recommended that students transfer after completing a mathematics sequence (such as developmental mathematics or college algebra) rather than in the middle of a sequence. Differences in classroom interaction and in the breadth of topics covered might also affect students' transfer experiences: fewer topics are covered in AMC's math courses than in GSU's, with the result that AMC transfer students might lack some knowledge required for upper-level GSU math courses.

Instrument development

The instrument development subcommittee developed five instruments for assessing course demands: a pre- and post-student survey, a pre- and post-faculty survey, and an observation instrument. The variety of instruments was intended to provide a valid overall assessment of the course by including the perspectives of students, instructors, and independent observers.

Two graduate assistants and subcommittee faculty analyzed the results by individual faculty member, by program, and by institution. Overall, the instructional methods used at both institutions are largely similar, including lectures, case studies, and student solutions. Results also indicated some consistency between institutions and between courses

with regard to the amount of time students spent on homework and with regard to the number of homework problems faculty assigned. However, AMC students appeared to interact more with their instructors than did GSU students, suggesting that they may have difficulty in GSU's "more analytical, less relational" course environment. Project administrators hope that this type of information will provide further insight into trends and procedures that hinder (or help) student transfer both between courses and between institutions.

In other partnership project activities, faculty members completed a College Albegra Inventory, detailing required operational skills and sample problems; participated in a project findings dissemination workshop attended by 50 faculty and administrators from both AMC and GSU; and attended an AMC faculty development retreat on curriculum revision.

Recommendations

- Provide regular opportunities for interinstitutional faculty discussion of commonalities and discrepancies in course content, instructional methods, performance expectations, and student success.

- Expand course assessment methods in order to apply them to courses in other disciplines.

- Involve colleagues in partnership project activities by including them in information dissemination workshops.

- Encourage faculty to be sensitive to students' obligations outside of class, as many students attribute their lack of academic success to non-academic responsibilities. Address these concerns in student advising and create appropriate institutional policies in order to provide students with adequate support.

CORPUS CHRISTI, TEXAS

Del Mar College and Corpus Christi State University (CCSU)

The Del Mar College/Corpus Christi State University partnership grant project, "Linking Courses and Faculty," was intended to increase transfer rates—especially among minority students—through increased inter-institutional faculty collaboration. Specifically, the project provided community college students with the opportunity to experience success at a senior institution. Project strategies included concurrent enrollment of students at Del Mar and CCSU and interinstitutional faculty exchanges.

Objectives

- To link courses at both institutions in order to encourage concurrent enrollment by community college students.

- To encourage faculty to collaborate with colleagues at the partner institution by planning courses cooperatively and sharing teaching responsibilities.

Impact

Five paired faculty members completed the exchange of duties at the partner institution. These included faculty in accounting; creative writing and English literature; ethnic studies and American history; modern algebra and calculus; and stratigraphy and historical geography. Each faculty member participated in joint course planning and taught approximately one-fifth of a "linked" course at the partner institution. Faculty also were available to students during office hours held at the partner institution.

The accounting exchange resulted in regular meetings of faculty from Del Mar's Division of Business and Corpus Christi's College of Business Administration for information and idea exchanges. Further, faculty from both institutions are now considering how they might further ease the transfer process. Finally, concurrent enrollment enabled community

college students interested in geology to continue their studies in the field without interruption. (Only freshman-level geology is taught at Del Mar.)

While logistical problems hindered the partnership's concurrent enrollment efforts, 28 students ultimately took advantage of the opportunity. The faculty exchange resulted in 122 Del Mar students being taught by CCSU professors, and the students' positive experiences with these professors have increased the chance of their transferring either to CCSU or to another four-year institution.

Recommendations

Those involved in the partnership grant found the experience to be extremely valuable to their respective institutions and do not offer any recommendations.

JACKSONVILLE, FLORIDA

Florida Community College at Jacksonville (FCCJ) and the University of North Florida (UNF)

The Florida Community College at Jacksonville/University of North Florida partnership grant project involved the formation of a collaborative faculty committee whose purpose was to facilitate interinstitutional faculty dialogue and information exchange in order to increase the number of transfer students and enhance transfer students' academic success. The project emphasized collaboration in the areas of assessment, course content, and instructional practices and also sought to integrate students' perspectives on the transfer process.

Objectives

- To develop a procedure for identifying faculty expectations for student success in selected English, mathematics, and science courses at both institutions.
- To identify teacher and student behaviors that contribute to student success.
- To appoint an ad hoc committee to correlate faculty expectations, as well as faculty and student behaviors, with student success.
- To develop, implement, and evaluate strategies for encouraging faculty and student behaviors that contribute to student success.

Impact

Throughout the project period, the FCCJ/UNF faculty committee met regularly, as did smaller, discipline-specific faculty groups. Participating faculty frequently sought input from administrators, other faculty members, and students. Because more than 75 percent of UNF undergraduates are FCCJ graduates, nearly every UNF division was interested in the project activities.

Ultimately, faculty in the English, mathematics, and science departments shared course syllabuses and discussed course expectations and

requirements, with the result that some courses were revised and some course sequences were reordered. Faculty members also studied and shared a variety of behaviors and instructional methods believed to enhance student learning, and they increased their commitment to advising students and being sensitive to special needs. Finally, faculty expanded their use of placement exams in order to more accurately advise students, and they developed plans to institutionalize FCCJ/UNF collaboration; this collaboration ultimately may include a teaching network that will expand faculty interaction beyond current project participants.

An external evaluator was retained to question committee members and a sample of other faculty and students about the FCCJ/UNF transfer process in order to gain insight into how the process might be improved. Students were pleased by the efforts of the joint faculty committee and made several suggestions for easing the transfer process, including better orientation to UNF, more individual assistance in developing independent study skills, and higher faculty expectations at FCCJ.

Faculty participants remain committed to realizing the project's objectives, and the top administrators at both FCCJ and UNF have expressed their commitment to implementing the project's recommendations.

Recommendations

- Garner top-level administrators' support, as they can encourage widespread involvement in efforts to enhance the transfer process.
- Encourage interinstitutional faculty collaboration by having faculty visit the partner institution in order to become familiar with its facilities and resources.
- Inform both institutions' departments of project efforts, and encourage their involvement.
- Involve students in discussions of the transfer process.
- Encourage faculty members to serve as student mentors.
- Invite transfer students to return to the two-year campus to meet with students interested in transferring.

RICHMOND, VIRGINIA

J. Sargeant Reynolds Community College (JSRCC) and Virginia Commonwealth University (VCU)

The J. Sargeant Reynolds Community College/Virginia Commonwealth University partnership grant project was designed to engage mathematics faculty from both institutions in meetings, conferences, and faculty exchanges. The project was intended to result in mathematics course and curriculum improvements, more accurate placement of transfer students in VCU math courses, improvements in faculty teaching and student learning skills, and increased faculty understanding of some of the barriers to transfer student success—particularly within the field of mathematics.

Objectives

- To initiate an exchange between the mathematics faculties of JSRCC and VCU in order to enhance faculty understanding of course content, placement policies, and instructional philosophies and techniques.
- To provide a means for collaborative mathematics course and curriculum development.
- To promote the improvement of faculty teaching and student learning skills.
- To promote faculty development and collegiality within and between institutions.
- To provide a forum for the exchange of ideas about placement methods.

Impact

Faculty exchange

During the spring and fall 1992 semesters, several faculty members participated in a faculty exchange and taught mathematics courses at the partner institution. Meetings were held to compare course content,

placement policies, and pedagogies. In addition to the mathematics exchange, two faculty members also "exchange taught" English courses.

Collaborative course/curriculum development
Two participating faculty members, one from JSRCC and one from VCU, developed an innovative, team-taught mathematics course for liberal arts majors. Student collaboration and "writing in mathematics" are important components of the course, which was piloted at both institutions in 1993.

Improvements in faculty teaching and student learning skills
In addition to the innovative faculty teaching and student learning methods incorporated into the newly designed "math for liberal arts majors" course, two mini-conferences were held to introduce JSRCC and VCU mathematics faculty to innovations and reform methods at other higher education institutions. Both conferences were well attended, and faculty have continued their discussions about how to improve their teaching and enhance their students' learning.

Promoting faculty development and collegiality
Faculty development and collegiality have been promoted through the development and implementation of the team-taught course, the two mini-conferences, faculty exchanges, and interinstitutional meetings. JSRCC's and VCU's presidents attended the reception and dinner following the first mini-conference, thereby underscoring the importance of the partnership project.

A spirit of cooperation now characterizes the mathematics departments at JSRCC and VCU. Departmental faculty confer regularly about a variety of objectives—not just those pertaining to the partnership grant. This collaboration is sure to result in a reduction of the barriers to transfer many students encounter.

Providing a forum for the exchange of ideas about placement methods
While faculty exchange participants devoted an entire meeting to placement issues, no changes have yet been made. However, the mere sharing of the institutions' placement tests, cut-off scores, and placement procedures helped participants develop a better understanding of some of the barriers to student transfer. A later meeting about placement issues will involve faculty exchange participants from subsequent semesters and

hopefully will result in some appropriate changes to both institutions' placement policies.

Recommendations

- Host social events off campus at which colleagues from both institutions can become acquainted and discuss common concerns.
- Sponsor workshops that will contribute to the professional development of both two- and four-year college faculty.
- Compile packets of course syllabi to share with departmental colleagues at partner institutions.
- Develop courses that can be team-taught (and/or collaboratively developed) by one community college instructor and one four-year college instructor.

SAN JOSE, CALIFORNIA

San Jose City College (SJCC), Evergreen Valley College (EVC), and San Jose State University (SJSU)

The San Jose City College/Evergreen Valley College/San Jose State University partnership grant project was designed to help participating faculty identify factors that contribute to minority transfer students' success and to make necessary curricular and pedagogical adjustments to ensure that those factors are not impeded.

Objectives

- To develop and implement exit standards for English and mathematics.
- To assess the performance of community college transfer students.
- To develop a follow-up method to track black, Hispanic, and low-income students through transfer and baccalaureate degree completion.
- To develop mechanisms for including courses from different disciplines in the Intersegmental General Education Transfer Curriculum.

Impact

Developing and implementing exit standards

Four collaborative symposia and several curriculum development meetings involving faculty from all three partner institutions were held. The "basic skills required to transfer" course sequence offered by SJCC and EVC was reassessed and restructured, and representatives from each of the participating colleges shared the demographic characteristics of underrepresented transfer students, course outlines and examinations, exit standards, and competency expectations. Reports from the symposia were disseminated and now are being used as the basis of supplemental award project activities. (See the Supplemental Grant section for further information.)

Interinstitutional departmental communication is ongoing. English, ESL, and mathematics faculty from each institution continue to meet bimonthly to refine assessment mechanisms and curricula (where necessary) in order to improve transfer students' academic performance.

Assessing transfer students' success

Project participants' review of student transfer data between 1986 and 1990 resulted in several studies of course enrollment patterns, including two annual studies of SJCC and EVC transfer students who took SJSU's junior-level writing skills test, and a longitudinal study of English and math course-taking patterns from precollegiate skills through transfer.

The studies' findings enabled faculty to modify curricula in ways that appear to have enhanced transfer students' success. For example, new methodologies and pedagogies—including open labs and bridge and supplemental instruction options for potential transfer students—have been applied to several English, ESL, and math courses.

SJCC, EVC, and SJSU faculty have benefited from symposia on learning styles and collaborative learning strategies and have been encouraged by the early successes of SJCC's "Gateway U." and "Afternoon College," which sequence English, math, and related transfer core courses.

Project participants have suggested that SJSU share "retired" exams with the SJCC and EVC assessment centers so that prospective transfer students can practice taking tests and receive "advance" feedback on the entrance exams they will have to take at SJSU.

Developing a follow-up tracking method

The community college district dean of academic standards and matriculation is currently analyzing data on SJCC and EVC transfer students' performance on university competency examinations. In addition, faculty reviewed the results of the longitudinal study, as well as the results of the writing skills study of SJCC and EVC transfer students, and identified needed changes in all three institutions' English and ESL courses.

Including other courses in the transfer curriculum

English, ESL, and mathematics faculty are participating in regularly scheduled meetings to share assessment and curricular strategies. In November 1992, 30 faculty from SJCC, EVC, and SJSU met with more than 100 faculty from colleges throughout California to share collabora-

tive learning strategies and institutional plans. Faculty have made several recommendations for revising curricular practices in order to increase the transfer rate of underrepresented students.

Recommendations

- Foster a true spirit of partnership among local higher education institutions.

- Provide regular opportunities for faculty from partner institutions to meet and exchange ideas.

SHREVEPORT, LOUISIANA

Southern University–Shreveport (SUS) and Louisiana State University in Shreveport (LSUS)

The Southern University–Shreveport/Louisiana State University in Shreveport partnership grant project was intended to increase the rate of minority and low-income student transfer from SUS to LSUS, to enhance the academic success of these students, and to increase the number of transfer students who earn baccalaureate degrees from LSUS. Because of partnership administrators' belief that faculty collaboration and commitment are essential to building academic bridges, the project focused on interinstitutional faculty collaboration in curriculum revision and instructional methods, faculty development, and student advising and support services.

Objectives

- To increase the rates at which SUS students transfer and earn their baccalaureate.
- To identify at least five disciplines in which core courses could be collaboratively restructured and taught in order to serve as "academic bridges" for potential transfer students.
- To provide faculty with opportunities to enhance their effectiveness in working with minority and low-income students.
- To enhance the effectiveness of student advising and student support services.

Impact

Collaborating on course content and instructional methods

Following a series of interinstitutional faculty planning meetings, nine courses were identified as partnership courses. (The disciplines from which these courses were selected included business, communications, education, English, mathematics, natural sciences, and sociology.) Faculty

members were paired and charged with the task of revising the course syllabi to reflect both common content and common expectations for student learning. During the project period, three courses were team-taught, and six utilized faculty exchanges.

The planning meetings and subsequent work opened channels of communication between colleagues at the partner institutions and demonstrated to students the institutions' commitment to enhance student success. SUS and LSUS also developed an articulation agreement in which transfer policies for business, education, general studies, liberal arts, and natural sciences students were made explicit. Curriculum transfer brochures specific to each major are being developed.

Faculty development opportunities

Three faculty development seminars were made available to all SUS and LSUS faculty: "Multicultural/Cross-Cultural Problems in Instruction" and "Learning Styles/Teaching Styles: Strategies for Success" were presented by consultants, and "Fostering Multicultural Sensitivity on Campus" was presented by two partnership program faculty teams who had developed and team-taught a course entitled "American Minority Groups."

Improving student advising and support services

The project had three specific objectives with regard to improving student advising and support services: to develop an early identification and tracking system, to establish advising centers on both campuses, and to utilize peer support groups to facilitate successful transfer. LSUS developed a tracking system, but SUS has not yet developed a system for identifying students interested in transfering. SUS tentatively agreed to allow LSUS to open an advising center on the SUS campus, but the effort has met with some resistance. Finally, an LSUS admissions counselor has agreed to alert SUS transfer students to the existence of peer support groups in an effort to integrate them into the campus community.

Conclusions

The impact of the partnership project has been widespread. Faculty and top-level administrators at both institutions have developed closer ties; a faculty team presented its work at a meeting in Texas; the LSUS and SUS faculty senates held a joint meeting at which they adopted a resolution "encouraging communication and interaction between both univer-

sities..."; students have applauded the institutions' collaborative spirit; LSUS developed a "Summerbridge" program for transfer students, utilizing faculty from SUS; and SUS has begun compiling lists of transfer students who are eligible for financial aid so that LSUS can provide them with scholarship information.

Recommendations

- Garner top-level administrators' support, as it is essential to developing interinstitutional agreements.
- Provide ample opportunity for interinstitutional faculty collaboration, as it is the key to program development and success.
- Ensure continuing communication among participating faculty by scheduling regular (and frequent) meetings.
- Focus on a limited number of objectives, realizing that institutional change happens incrementally.

TUCSON, ARIZONA

Pima County Community College District (PCCCD) and the University of Arizona (UA)

The Pima County Community College District/University of Arizona partnership grant project, "Partnership to Aid and Retain Transfer Students" (P.A.R.T.S.), was intended to enhance PCCCD students' opportunities to transfer to UA. Toward that end, a variety of activities were designed to provide proper support services, increase both the quantity and quality of student/faculty interaction, and create hospitable classroom environments.

Objectives

- Institute culturally relevant curriculum changes.
- Provide opportunities for student interaction with faculty mentors.
- Broaden minority transfer students' aspirations and academic experiences.
- Inform students about the transfer process.
- Prepare PCCCD students for UA's academic demands.
- Pair participants with UA peer advisors.

Impact

Beginning in fall 1991, six faculty members from both PCCCD and UA were granted release time to participate in the partnership grant project. PCCCD students were selected for participation on the basis of several criteria, including minority status, transfer plans, and academic record. Both faculty and students were oriented to the objectives of the project, and peer advisors were selected from among the students. Early in the spring 1992 semester, peer advisors held a planning meeting during which they discussed their objectives and strategies. From January

through April, peer advisors and faculty mentors held both group and individual sessions for PCCCD students interested in transferring to UA. Professional development workshops for faculty also were held during the spring semester.

Faculty attended three training sessions designed to enhance transfer opportunities for minority students. The workshops focused on changing classroom environments, modifying curricula, and developing strategies. Findings from the workshops were presented in September 1993 at the Arizona Advising Conference, an annual meeting of faculty, academic advisors, and counselors from institutions throughout the state. Facilitated by UA and PCCCD faculty and Center for Transfer Students staff, additional workshops focused on financial aid and curriculum development.

In order to make the transfer process more relevant to PCCCD minority students, P.A.R.T.S. faculty developed and offered a two-credit Human Development Education (HDE) course. "Transfer Strategies" (HDE 105) provided students with important information about admissions, orientation, UA transfer criteria, and other pertinent issues. Students also were encouraged to participate in the Transfer Summer Institute, a four-week, on-campus liberal arts program offered at UA. HDE 105 and several Summer Institute courses were taught by teams of PCCCD and UA faculty.

PCCCD and UA faculty from liberal arts disciplines were responsible for mentoring between six and ten students each. Peer advisors also met with P.A.R.T.S. students weekly, answering questions about admissions procedures, financial aid and college expenses, course transferability, academic advising, and UA retention services.

Providing pre-transfer services and opportunities for increased student/faculty interaction resulted in a greater number of PCCCD students transferring to UA. Responses to a post-project questionnaire indicated that students were much more confident about transferring to a four-year institution after participating in P.A.R.T.S. Most respondents also indicated that personal interaction with staff, peers, and faculty was the most important element of the program. The UA Center for Transfer Students will continue to monitor the progress of P.A.R.T.S. students, including their rate of transfer and the rate at which they earn the baccalaureate.

Recommendations

- Make P.A.R.T.S. available to all PCCCD students.
- Ensure that transfer activities remain culturally and socially sensitive, regardless of participants' backgrounds.
- Develop program components that are accessible to all students, including those who work full time.
- Encourage faculty mentors to be conscientious about their appointments and to be more widely available for individual consultation.

UNIVERSITY PARK, ILLINOIS

South Suburban College (SSU) and Governors State University (GSU)

The South Suburban College/Governors State University special partnership grant project involved 20 faculty members in an effort aimed at reducing students' "math anxiety" and improving student performance in mathematics courses.

Objectives

- To offer professional development workshops aimed at improving faculty members' instructional delivery methods.

- To develop a study skills module delineating several components and methods for improving students' ability to study for mathematics.

Impact

A collaborative team of four faculty coordinators and administrators planned the professional development workshops and developed the final version of "The Study Skills Module for Mathematics." The module includes nine components: "Reading the Mathematics Textbook," "Problem-Solving Skills," "Note-Taking and Note-Using Skills," "Understanding the Material," "Work with Others," "Studying for the Test," "Taking the Test," "Time Management," and "Get Help When You Need It." Each component describes methods for improving students' abilities on a single page, so the packet is easily duplicated. A companion instructor's guide includes teaching tips.

The module was tested in 23 SSU math courses, from arithmetic to algebra and trigonometry, and in several GSU math courses, as well. Both faculty and students completed written evaluations of each component included in the module. Of the 393 SSC students who returned evaluations, 81 percent indicated that they had tried to incorporate the skills into their class preparation, and 77 percent "found these study skills to be helpful." Overall, students were enthusiastic. Several asked, "Why didn't anyone teach me these skills earlier in my mathematics education?"

At the final project workshop, all faculty participants reviewed the evaluations and discussed further modifications to the study skills module. The final revised version of "The Study Skills Module for Mathematics" will be made available to faculty at other institutions for use as is or with adaptations to meet their specific needs.

A partnership grant project evaluation revealed that participants found the project to be beneficial. All but one faculty member, who does not teach courses appropriate for use of the module, stated that they would use it in their courses, even after completion of the project. All participants indicated that they had learned a technique applicable to their individual classes—cooperative teaching, studying for math specifically, developing basic study skills, etc. Overall, faculty were enthusiastic about their participation in the project; 12 said that the interaction with colleagues was "great."

The partnership grant project spurred the development of several related initiatives, including the "Lower Division Coalition." The coalition involves the five community colleges within GSU's region and enables students to take freshman- and sophomore-level courses at GSU from community college professors.

Recommendations

- Ensure continued interaction and cooperation among faculty and administrators.

- Encourage faculty involvement in all aspects of strengthening the transfer process, including curriculum revision and articulation.

DESCRIPTIONS OF SUPPLEMENTAL GRANT PROJECTS*

Atlanta
Boston
Chicago (2)
Corpus Christi
Detroit
El Paso
Memphis
Newark
New York City (2)
Richmond
San Antonio
San Diego
San Francisco
San Jose
Tucson

* *Both Phase I and Phase II partnership schools received supplemental grants. Some are reported here. The remaining schools chose to incorporate their supplemental grant activities into their partnership or core curriculum work.*

ATLANTA, GEORGIA

Atlanta Metropolitan College (AMC) and Georgia State University (GSU)

The purposes of the supplemental grant to Atlanta Metropolitan College and Georgia State University were to disseminate information about the partnership project to developmental studies and mathematics faculty at both institutions and to involve a large number of faculty from both institutions in implementing the pilot data. Toward this end, the following three activities were undertaken:

- Two additional mathematics faculty (one from each institution) were appointed to the partnership project team in order to complete the "College Algebra Inventory";
- A luncheon workshop was held so faculty could be apprised of the project's results; and
- A development retreat was held for AMC faculty.

College algebra inventory

During Phases I and II of the partnership project, a faculty team collaboratively developed an inventory of college algebra operational skills and topics, including a brief description, an example, and sample problems of varying levels of difficulty. The inventory was intended to help faculty better advise students about course sequences, both within and between institutions. Copies of the inventory are now being distributed to both institutions' faculty, and also will be disseminated nationally.

Luncheon workshop

In February 1993, a luncheon workshop was held for 50 AMC and GSU faculty and administrators. In addition to providing attendees with the opportunity to meet one another, the luncheon served as a forum in which project participants could describe the project and preliminary results with colleagues. The highlight of the luncheon was a guest presentation by a mathematics professor participating in a partnership grant project in Virginia.

AMC faculty development retreat

The development retreat for AMC faculty was intended to provide participants with a theoretical framework for reviewing and enhancing course syllabi, as well as to initiate the revision of course objectives to reflect institutional priorities. (Institutional priorities include improving student success on area exams, facilitating the transfer of AMC students to senior institutions, and improving AMC students' critical thinking skills and abilities.) The presenter focused on improving instruction at AMC and emphasized writing objectives, implementing instructional strategies, and evaluating instruction for different levels of learning.

The activities undertaken with support from the supplemental grant relate directly to the objectives of the AMC/GSU partnership project. Supplemental funding enabled project participants to share the project's results with colleagues and to involve a greater number of AMC and GSU staff in the partnership grant effort.

BOSTON, MASSACHUSETTS

Roxbury Community College (RCC) and Northeastern University (NU)

The supplemental grant to Roxbury Community College and Northeastern University was intended to facilitate the transfer of RCC students into NU science and mathematics courses. Specifically, the supplemental grant supported the design of two laboratory-based courses to improve students' chances of success in NU's introductory physics course. Many students enrolling in NU's engineering program are inadequately prepared for the introductory physics course and thus either perform poorly or drop the course altogether. The problem is particularly acute among minority students, whose attrition rate is quite high.

Students are selected from among minority high school seniors who have participated in NU's summer calculus program and RCC pre-engineering students. The courses, "Selected Topics in Physical Science, I and II," are laboratory-based, as several studies have demonstrated that participation in inquiry-based laboratories results in higher levels of student learning than traditional lecture/laboratory formats.

Students begin by trying to understand some physical phenomenon on the basis of their current knowledge. Gradually, they are guided toward translating what they understand intuitively into the language of physics and mathematics. Collaborative learning is encouraged throughout both courses. Topics covered include mechanics, energy, optics, gas-phase equilibrium, thermodynamics, kinetics, and other areas that require the expertise of several members of both the science and mathematics departments. (Thus, the courses are team-taught by members of both departments.) Course grades are based primarily on lab reports (70 percent), with the remainder being based on lab-based exams (20 percent) and the final exam (10 percent).

The development of "Selected Topics in Physical Science" was an outgrowth of the collaboration begun in the RCC/NU partnership project, which was intended to enable minority students from RCC to cross-register at NU in order to facilitate their eventual transfer. By developing these courses to fill in "gaps" in the knowledge base of promising minority and pre-engineering students, it is hoped that the number of transfer students who ultimately succeed in NU's introductory physics course will increase.

CHICAGO, ILLINOIS

Olive Harvey College (OHC) and Chicago State University (CSU)

The supplemental grant to Olive Harvey College and Chicago State University was intended to aid the institutions in their efforts to establish a tracking system for OHC transfer students and to continue inter-institutional faculty meetings in order to further the objectives of the OHC-CSU partnership grant project.

As of early 1993, CSU had obtained data pertaining to 241 OHC transfer students and had developed a procedure for continuing to collect such data. Data include the student name, GPA, program major, performance on CSU placement tests, date of transfer, etc. OHC gathered corresponding data, and OHC and CSU data were analyzed together to determine topics for faculty colloquia held later in the spring.

Subsequently, interinstitutional, discipline-based meetings were held at which faculty discussed CSU placement tests and evaluation procedures for math, reading, and English; the relationship of OHC general education courses to CSU program requirements; entrance and exit criteria and assessment methods for general education courses; findings from the data compiled on OHC transfer students; and other issues related to the transfer of OHC students to CSU. The discussions raised several important questions, and most participants agreed that the dialogue—and the collaboration—should continue.

The supplemental grant also supported project administrators' attendance at both the 1992 American Association of Community and Junior Colleges' Annual National Convention and the Leadership 2000 Conference sponsored by the League for Innovation in the Community College. A faculty coordinator also developed and administered a survey of OHC faculty to determine how much writing is required of students in courses other than English composition.

Each of the activities undertaken with support from the supplemental grant continued the efforts of the OHC/CSU partnership grant project, which aimed in part to improve transfer students' success by coordinating the content of OHC courses with CSU entrance examinations in English, math, and reading. Tracking system data in particular indicated that the courses developed as part of the initial OHC/CSU partnership

project were on target and that faculty should continue to collaborate in order to determine further improvements that could be made to enhance future transfer students' academic success.

CHICAGO, ILLINOIS

Harry S Truman College (TC) and Loyola University Chicago (LUC)

The supplemental grant to Harry S Truman College and Loyola University was intended to support continuing interinstitutional dialogue about faculty expectations of students. The following activities were undertaken in support of this objective:

- Individual and small-group interviews were conducted with more than 40 percent of TC transfer students attending LUC;
- An interinstitutional meeting was held for selected TC and LUC faculty;
- Student interview results were disseminated to faculty at both institutions; and
- English, business, and nursing faculty from both TC and LUC met to continue discussions about faculty expectations and course content.

Two graduate coordinators were assigned the task of interviewing transfer students about the transfer process and about their academic experiences at both TC and LUC. The interviews were intended to help TC and LUC faculty and administrators determine ways to facilitate the transfer and retention of community college students. Students suggested the need for articulation agreements and better advising at both TC and LUC and remarked on the differences in the learning environments (including demographics, competitiveness, faculty expectations, academic standards, etc.).

An interinstitutional faculty meeting was held in November 1992. Participants were presented with an overview of the Truman/Loyola Bridge Program, and guest speaker Dennis McGrath spoke about "Academic Culture in the Community College." Interview results were presented, and participants were divided into small groups to discuss steps that could be taken to address some of the students' concerns. Prior to

closing the meeting, the groups reported on their discussions and shared their reactions with one another.

Finally, faculty from the English, business, and nursing departments at both TC and LUC met to discuss faculty expectations and course content in the hope of making further adjustments that will contribute to transfer students' academic success.

Each of these activities continued the efforts of the TC/LUC partnership grant project, two objectives of which were to increase the number of students transferring from TC to LUC and to identify academic or administrative barriers that inhibit student transfer. The efforts undertaken throughout the duration of the supplemental grant, as well as those undertaken as part of the partnership project grant, already are proving beneficial. TC and LUC faculty and administrators are more familiar with one another—a fact that is sure to contribute to further collaboration. Also, the student interview responses disseminated to faculty are sure to generate continuing dialogue about what faculty and administrators can do to facilitate the transfer of students from TC to LUC and then to ensure their academic success.

CORPUS CHRISTI, TEXAS

Del Mar College (DMC) and Texas A&M–Corpus Christi (TAMCC)

Del Mar College and Texas A&M–Corpus Christi used their supplemental grant to support the project "Linking Courses and Faculty," which enabled community college students to assess the likelihood of their succeeding at a four-year institution—especially Texas A&M–Corpus Christi. Project strategies included concurrent enrollment and interinstitutional faculty exchanges.

Four faculty pairs completed their exchange of duties at the partner institution during the spring 1993 semester. Courses affected were accounting, creative writing/English literature, modern algebra/calculus, and stratigraphy/historical geology. Three of the four faculty pairs (teaching accounting, algebra/calculus, and stratigraphy/historical geology) were selected to repeat the exchange during the fall 1993 semester. Each faculty member planned his or her course collaboratively and taught approximately one-fifth of the "linked" course at the partner institution; each also was available for individual contact during office hours at the partner institution.

In addition to the faculty "link," three conferences were held at Texas A&M–Corpus Christi for administrators, staff, faculty, and students to discuss transfer issues and to heighten awareness of some of the barriers to transfer. Approximately 100 people participated in each conference. DMC faculty participants were invited to bring two students they deemed outstanding and to introduce them to a TAMCC faculty counterpart. Students were pleased to be able to meet their future faculty advisors, and everyone benefited from the exchange of information at the meeting.

Finally, Texas A&M–Corpus Christi purchased a system that electronically transfers student data from DMC to TAMCC; both record keeping and student tracking should now be easier. TAMCC also purchased the same telephone registration system DMC has been using, so transfer students should no longer be inhibited by different registration procedures.

Coordinators from both institutions believe the supplemental grant was invaluable in terms of enabling them to complete some of the

objectives set forth in the partnership grant—including linking courses at both institutions in order to familiarize potential transfer students with TAMCC faculty and to foster collaboration among DMC and TAMCC faculty. Provisions for concurrent enrollment and faculty collaboration ultimately should increase the number of students transferring from DMC to TAMCC and improve their academic performance at the senior institution.

DETROIT, MICHIGAN

Highland Park Community College (HPCC) and the University of Detroit Mercy (UDM)

Highland Park Community College and the University of Detroit Mercy used their supplemental grant to support a mini-conference and a survey study which enabled partnership project administrators to evaluate the effectiveness of their efforts to ease transfer students' transition from HPCC to UDM.

The mini-conference, held in August 1992, was designed to enable project participants from HPCC and UDM to share information about their institutions' efforts to facilitate the transfer process. HPCC efforts include program planning that begins during students' first semester at HPCC and a student orientation program that emphasizes a four-semester plan that ensures that course credits will transfer. Efforts at UDM fall into the categories of admissions, advising, and University Advising and Academic Services (UAAS). The admissions office provides information about programs, costs, and transfer credits, and it arranges campus visits for students interested in transferring. The advising office seeks to build relationships with transfer students by answering preliminary questions and by conducting informal transfer evaluations and initial advising. UAAS screens and interviews high-risk transfer applicants and tracks and assesses their performance; it also serves students through its Learning and Writing Center, which provides free tutoring in all subject areas, both during the day and in the evening.

In order to evaluate the success of the institutions' efforts, a survey was distributed to HPCC students who had transferred to UDM. The survey response rate was only 9 percent, but the responses were interesting nonetheless. For instance, 72.3 percent of respondents noted that they were satisfied with the contact they had with ten service areas within the university. (Twenty percent of respondents indicated they had not had occasion to use the services provided.) Satisfaction was greatest with admissions and advising (83.3 percent) and least with financial aid (26.6 percent). Students also were asked to complete several open-ended questions addressing such areas as community college preparation and first impressions of UDM. While some students reported that they had been overwhelmed at first, most felt that HPCC had prepared them well.

Student-oriented advisors, instructors, and services at UDM were all cited as having enhanced the transfer process.

One of the objectives of the HPCC/UDM partnership grant project was "to address the performance expectations of transfer students before their departure from the community college and to improve the likelihood of success at the four-year institution." Both the mini-conference and the student survey indicate that HPCC and UDM are succeeding in their efforts—efforts ultimately intended to facilitate student transfer from community college to a four-year institution.

EL PASO, TEXAS

El Paso Community College (EPCC) and the University of Texas at El Paso (UTEP)

The purpose of the supplemental grant to El Paso Community College and The University of Texas at El Paso was to support the development of a laboratory component for an introductory biology course for non-science majors to be offered by both institutions.

During the summer of 1992, a consultant and two faculty members worked on the project. They completed and partially tested five lab exercise modules, and three additional modules were partially completed. Modules included labs on topics such as osmosis and diffusion, environmental pollutant detection by leaf fingerprinting, and biological diversity studies based on museum collections. The modules were tested during two semesters (fall 1992 and spring 1993) at UTEP and are being introduced into the EPCC curriculum. Feedback from students and teaching assistants has been primarily positive, and some modules are being revised in response to student and faculty suggestions.

The supplemental award enabled partnership project participants to expand their effort to offer compatible curricula at EPCC and UTEP in the field of science and to thereby enhance community college students' ability to transfer successfully to a four-year institution. Original partnership project objectives focused on revising the English 3112 curriculum at both EPCC and UTEP, but the effort to develop a compatible biology course has met with far more success.

MEMPHIS, TENNESSEE

Shelby State Community College (SSCC) and Memphis State University (MSU)

The Shelby State Community College/Memphis State University supplemental grant was intended to support:

- Three workshops on critical thinking in the core curriculum;
- A one-day conference on general education and transfer; and
- Two "SSCC days" on the MSU campus.

Workshops on critical thinking in the core curriculum

The supplemental grant proposal called for the professional staff of MSU's Center for the Study of Higher Education to lead a series of three workshops dealing with critical thinking. The workshop plan departed slightly from the original proposal insofar as five scholars from other institutions were brought in to lead the workshops. The workshops focused on collaborative learning; "education as transformation"; and active learning, and were attended by 30–40 individuals, including partnership project participants and other invited faculty members.

Responses to the workshops were favorable, but project directors were unsure as to whether any of the strategies presented at the workshops were ever implemented in the classroom. One reason for the lack of implementation may be that faculty members felt they could not change their teaching style in the middle of the semester. Nevertheless, academy members expressed a desire to continue the dialogue concerning the strategies presented at the workshops.

Conference on general education and transfer

In cooperation with MSU's Center for the Study of Higher Education, the SSCC-MSU partnership hosted a one-day conference on academic achievement and transfer attended by 130 individuals from Tennessee, northern Mississippi, and eastern Arkansas. Partnership General Academy members were involved in four presentations: "Curricula Coherence: Threat or Opportunity?"; "The Transfer Process: Faculty and Student

Perspectives"; "Curricular Coherence: New Relationships"; and "Experiences in Tracking: Applications of the Insight System." Four other sessions addressed community issues; legal issues; professional development; and student tracking (of particular interest to Tennessee Board of Regents community college attendees). Several out-of-state attendees commented on MSU and SSCC's experiences and the apparent benefits of their cooperation.

"SSCC days" on the MSU campus

The objective of holding two SSCC days was only partially met, as only one was held. Twenty-one SSCC students participated, having been selected on the basis of their GPA, enrollment in a transfer program, and the number of credit hours earned. Five SSCC counselors also participated, as did several SSCC faculty members. Information sessions on majors, financial aid, adult and commuter services, student activities, and educational resources were offered, and SSCC students were given tours of the campus. Perhaps most important, participants had the opportunity to speak with MSU faculty, administrators, and students.

Coordinators from both SSCC and MSU believe the supplemental grant was critical to enabling them to complete some of the objectives set forth in the partnership grant, including involving faculty members from both institutions in evaluating MSU's general education courses. The workshops, the conference, and the SSCC day held at MSU all enabled faculty to work together toward enhancing the transfer process for SSCC students.

NEWARK, NEW JERSEY

Essex County College (ECC) and Rutgers/Newark University (RNU)

The purpose of the supplemental grant to Essex County College and Rutgers/Newark University was to allow the partnership to sustain the momentum gained during the initial grant period; to expand and enlarge partnership project activities; and to continue to collect data on transfer students.

In the area of curriculum development, the interinstitutional English and math teams continued their efforts to identify barriers to transfer. The English team developed standards for evaluating student writing in order to ensure consistent grading methods and thereby ease students' transition from ECC English courses to RNU English courses. The English team also considered ways to help inner-city and foreign students overcome limited writing proficiency. The math team continued its discussions about teaching methods and curriculum and continued its faculty exchange, as well. The growing rapport among members of both teams helped build the trust that is prerequisite to change and, ultimately, to a smoother transfer process.

New interinstitutional faculty teams were formed in several disciplines: business and accounting, chemistry, and psychology. The teams already have made significant progress in comparing course syllabi in order to determine course equivalencies. Faculty from the New Jersey Institute of Technology (NJIT), another four-year institution to which significant numbers of ECC students transfer, have joined some of the discipline teams.

Transfer advisors at both ECC and RNU became more actively involved in ensuring the smooth transfer of ECC students and in identifying areas in need of clarification, but budgetary constraints precluded the development of a data collection system to track transfer students and their academic records.

The supplemental grant project culminated in a conference, "Making Access Work," which featured presentations by the director of The Ford Foundation's program on urban partnerships, a panel of transfer students, and the faculty teams. Conference summaries were later distributed to faculty members at ECC, RNU, and NJIT.

The most significant event to transpire during the supplemental grant period was the signing of a joint ECC/RNU admissions agreement. The agreement specifies the course sequences ECC students must take in order to qualify for junior standing at RNU. Faculty members, as well as transfer advisors and institutional administrators, will be responsible for implementing the agreement.

The supplemental award enabled EPCC and RNU faculty to expand upon the original partnership project's goals, which included developing a collaborative relationship between English and mathematics faculty and identifying barriers to transfer and means for overcoming them. Supplemental award activities reinforced project administrators' conviction that faculty involvement is critical to easing the student transfer process.

NEW YORK CITY, NEW YORK

Borough of Manhattan Community College (BMCC) and Hunter College (HC)

The Borough of Manhattan Community College and Hunter College supplemental grant was intended to support ongoing efforts to help BMCC students transfer successfully by improving articulation in specific curriculum programs; hosting a conference to examine current issues in articulation and to present successful models; and developing brochures.

During the supplemental grant period, project administrators focused on developing comprehensive articulation agreements for students in specific majors—particularly science and mathematics. Departmental faculty from both institutions ultimately developed curricula for biology, chemistry, computer science, and physics that enable BMCC students to receive full transfer credit and to enroll in junior-level courses with the same competencies as Hunter students. (Both BMCC and Hunter faculty accepted the curricula.) Negotiations with mathematics faculty are currently underway.

All 14 City University of New York (CUNY) institutions were represented at the conference, "Current Issues in Articulation." Representatives of the BMCC/HC and City College of New York/Kingsborough Community College partnership projects made presentations, and afternoon break-out sessions involved participants in discussions about improving collaboration on course development and articulation, strategies for updating equivalency information, and mechanisms for sharing data on student progress and program choice.

Finally, BMCC and Hunter articulation officers developed several informational brochures to assist students transferring to senior colleges in the CUNY system. One brochure focuses specifically on BMCC-Hunter College articulation, and another focuses on BMCC student transfer to other four-year CUNY colleges. Other brochures were developed for students transferring to Hunter from feeder schools other than BMCC, including LaGuardia Community College, Queensborough Community College, and Kingsborough Community College.

BMCC and Hunter College used their supplemental award to expand upon their original partnership project's goals, which included eliminating barriers to course credit transfer and removing other obstacles

to BMCC student transfer. While the partnership project was aimed at resolving several issues related to the transfer of credit for general education courses, the supplemental grant project built upon that effort by focusing on similar issues in science and mathematics. Both the conference and the informational brochures are further indications of BMCC and Hunter's commitment to eliminating obstacles to student transfer.

NEW YORK CITY, NEW YORK

Kingsborough Community College (KCC) and City College of New York (CCNY)

The supplemental grant awarded to Kingsborough Community College and the City College of New York was intended to support a one-day conference on facilitating the transfer and retention of English as a Second Language (ESL) students.

Early in the fall 1992 semester, the provosts at each of the ten City University of New York (CUNY) institutions were asked to submit the names of faculty who should be invited to attend the conference. Each of the faculty members was then invited (by letter) to attend "ESL Students in the CUNY Classroom: Faculty Strategies for Success." Nearly 100 faculty members from a variety of academic disciplines attended the program.

The program's keynote address and panel discussion were designed to stimulate thinking about issues pertaining to ESL students at both community and four-year colleges. The afternoon session, which involved a workshop format, enabled conference participants to discuss their own thoughts about teaching and learning strategies. Each small group was facilitated by two faculty members—one from a two-year college and one from a four-year college. Overall, the conference provided a special opportunity for two- and four-year college faculty to discuss ESL students and related challenges, including teaching techniques, class groupings, and written and oral assignments.

Conference proceedings were published and distributed to participants and others throughout the CUNY system. Two conference participants will also share the proceedings with a broader audience by attending several other conferences related to transfer and to ESL students, in particular.

The supplemental grant to KCC and CCNY enabled project participants to supplement their previous partnership grant efforts to increase the number of KCC ESL students transferring to CCNY and other CUNY senior institutions. The conference provided an opportunity for faculty members from ten CUNY institutions to collaborate with colleagues from their own and other institutions in determining effective practices for promoting ESL student transfer. It is hoped that such collaboration will continue and that further progress will be made in eliminating barriers to ESL student transfer.

RICHMOND, VIRGINIA

J. Sargeant Reynolds Community College (JSRCC) and Virginia Commonwealth University (VCU)

The purpose of the supplemental grant to J. Sargeant Reynolds Community College and Virginia Commonwealth University was to facilitate interinstitutional faculty collaboration as a means of increasing the student transfer rate, particularly among minority students. Supplemental grant activities included coordinating and implementing a faculty exchange between JSRCC and VCU English faculty.

During the fall 1992 semester, two faculty members (one each from the JSRCC and VCU English departments) were selected to coordinate the English department faculty exchange. A conference involving both institutions' English departments was held in November 1993. The conference was intended to enable JSRCC and VCU faculty members to introduce themselves to one another and to promote a better understanding of both departments' goals, course contents, and instructional philosophies and techniques.

At the conference, sample syllabi and assignments from freshman and sophomore English courses from both institutions were made available. A member of the VCU mathematics department opened the conference by describing how the mathematics faculty had made use of, and benefited from, the original partnership grant. Next, representatives of the JSRCC and VCU English department faculty made some introductory remarks about their respective departments. The open discussion that followed provided conference participants with information about placement procedures, problems with credit transfer, and course goals and student skills. Finally, refreshments were provided in order to establish a more informal atmosphere in which participants could meet one another and share ideas.

The faculty exchange began in spring 1993 with one VCU professor teaching a sophomore-level course at JSRCC and one JSRCC professor teaching a sophomore-level course at VCU. The exchange faculty met frequently throughout the semester to discuss assignments, presentation of subject matter, and exams. At the end of the semester, the exchange faculty determined that students, upon entering the courses at JSRCC and VCU, have essentially the same skills and backgrounds and are

equally successful in their coursework. This suggests that students who transfer from JSRCC should succeed in their coursework at VCU. However, more exchanges and data are needed to confirm this impression.

In April, all English department faculty from both institutions were invited to participate in a dinner conference. A guest speaker from the University of Minnesota considered the role of the writing teacher in evaluating student portfolios. The conference also provided faculty members with a further opportunity to meet one another and exchange ideas.

The supplemental grant to VCU and JSRCC built on the original partnership project grant by involving the English departments of both institutions in the effort to improve minority student transfer. By expanding the number of faculty involved in the grant project, awareness of specific problems associated with transfer was increased, and faculty became better able to address some of those problems.

SAN ANTONIO, TEXAS

Alamo Community College District (ACCD) and the University of Texas at San Antonio (UTSA)

The purpose of the supplemental grant to the University of Texas at San Antonio was to support participating institutions' efforts to further eliminate barriers to student transfer. Supplemental grant activities included sending one Palo Alto College faculty member to a University of Chicago conference on "Changing Curricula/Changing Practice: World Cultures and General Education" and sending one UTSA faculty member to a COMDEX convention. Each of these faculty members has been instrumental in designing courses for the Domain II (Culture, Society, and Ethics) and Domain III (Language, Literature, and the Arts) portions of the core curriculum initiated under the original partnership grant. Currently, the UTSA faculty member is leading the effort to computerize core curriculum music courses.

Supplemental grant activities also included a series of development seminars for faculty from each of the four institutions participating in the grant, as well as the design of a series of UTSA core curriculum courses that can be taught at any of the four participating institutions. The new core curriculum has been included in the 1994–96 UTSA undergraduate catalog, and UTSA is sponsoring programs to enhance its capacity to offer courses in those areas of the proposed core curriculum (including the science laboratory and ethics requirements) that were postponed because of insufficient resources. Participating community colleges are revising their common core curricula so they will correspond to the UTSA core.

Finally, a conference was held for participants from the San Antonio project institutions and other colleges throughout Texas. A final SACCP conference is scheduled for May 1993 and will focus on faculty development, the special circumstances of community colleges, and relationships with local secondary schools.

The supplemental grant to ACCD and UTSA built on the original partnership project grant by supporting the institutions' efforts to design and implement a core curriculum that would result in an increased number of students—particularly underrepresented students—transferring to UTSA.

SAN DIEGO, CALIFORNIA

Southwestern College (SWC) and San Diego State University (SDSU)

The Southwestern College/San Diego State University supplemental grant was intended to involve more faculty in the work initiated under the partnership grant; to enable participants to design a program of writing across the disciplines and to have upper-division SDSU tutors implement the program; and to conduct workshops and a team planning session to design and implement the activities necessary to make writing across the disciplines a permanent institutional practice.

Six additional SWC faculty members were involved in the work begun under the partnership grant. This included two faculty members from each of the disciplines involved in the partnership effort: English, history, and philosophy. Faculty members worked closely with other supplemental grant participants during three day-long workshops and in discipline-based meetings held throughout the year.

At the first workshop, the disciplinary teams identified and discussed course sequencing and critical thinking/writing assignments that would enhance SWC students' transfer experiences. At the second workshop, held one month later, team members identified and discussed course standards for those courses they had determined to be comparable. SDSU students who had worked as tutors in SWC's Writing Center met with the faculty teams to share their experiences and perceptions of SWC students' writing abilities and needs. Four SWC/SDSU transfer students also shared their experiences with the faculty teams. At the final workshop, the faculty teams identified specific critical thinking and writing activities to include in both institutions' courses. The teams shared their recommendations with disciplinary colleagues in staff development activities held throughout the fall 1993 semester.

The supplemental grant to SWC and SDSU enabled project participants to expand their previous partnership grant efforts by increasing the number of faculty members involved in reviewing, assessing, and modifying academic practices in order to improve transfer effectiveness. The workshops in particular were invaluable in

helping participants build a stronger foundation of interinstitutional cooperation. Participating faculty are convinced that implementing the critical thinking and writing activities in the English, history, and philosophy curricula will greatly enhance SWC students' chances of transferring successfully to SDSU.

SAN FRANCISCO, CALIFORNIA

Peralta Community College District (PCCD) (including Laney College [LC] and Merritt College [MC]), Holy Names College (HNC), and San Francisco State University (SFSU)

The purpose of the supplemental grant to the Peralta Community College District, Holy Names College, and San Francisco State University was to train Laney College and Merritt College faculty members to use the "Computerized Educational Planning System" (previously purchased by PCCD). Supporting this training with a supplemental grant enabled minority students in particular to benefit from a consistent, accurate, and formalized education plan that specified the timing and sequencing of courses (including remedial courses) required to attain an associate's (or baccalaureate) degree in a timely manner. The Computerized Educational Plan can help students overcome this barrier, but the degree of its success is contingent upon faculty advisors' skill in utilizing the plan. A secondary purpose of the grant was to train selected HNC and SFSU faculty to use the Computerized Educational Plan.

Although initially there was limited interest among HNC and SFSU faculty members, the total number of community college faculty who demonstrated an interest in being trained grew to more than double grant administrators' original estimates. (Instead of the 12 faculty members grant administrators had planned to train, 32 were trained.)

A third purpose of the grant was to demonstrate the plan and its effectiveness to faculty at other area community colleges, as well as to the general public. To accomplish this purpose, four group presentations were scheduled, in addition to the individual training sessions. Each of the presentations involved demonstrations using real (but disguised) student data, and was followed by a question and answer session. Technical aspects of the program also were discussed, as were its alternative uses.

The first presentation was to the PCCD Board of Trustees, chief administrators and faculty representatives from each of the PCCD colleges, students, and members of the public. The second demonstration was held for the president and chief administrators of Laney College, as well as representatives from the college's counseling staff. The third presentation was made at Santa Rosa Junior College, where participants

included student services administrators, data processing personnel, student counselors, and a faculty representative. The final presentation was made to counselors, instructors, EOP&S and DSP&S personnel, and student services and academic administrators from the two PCCD colleges not involved in the original partnership project; other PCCD personnel, as well as interested Laney and Merritt College staff, also participated.

Participants in the supplemental grant project activities were overwhelmingly enthusiastic about the plan, stating that it "is a great program," "is really simple to use," and "could even be used interactively." Concerns about the plan pertained to the integrity of the data and potential effects on the student-counselor relationship.

The supplemental grant to PCCD and SFSU related to the original partnership grant insofar as it enabled project participants to expand their efforts to increase underrepresented students' transfer rate to a baccalaureate-granting institution. Whereas the original partnership grant supported the establishment of "BAPTECUM," a program designed to increase the rate of transfer of underrepresented students in the areas of science and mathematic - the supplemental grant project aimed to further those efforts by training faculty to better counsel students through the use of the Computerized Educational Plan.

SAN JOSE, CALIFORNIA

San Jose City College (SJCC), Evergreen Valley College (EVC), and San Jose State University (SJSU)

The supplemental grant to San Jose City College, Evergreen Valley College, and San Jose State University was intended to support the institutions' efforts to engage existing partnership faculty in a discussion of pedagogical strategies that would relate directly to the standards for success on writing and computation/problem-solving measures; to involve additional English and mathematics faculty in the partnership; to enhance interinstitutional department relationships by involving community college faculty in senior institutions' discussions of assessment and curriculum issues; and to support future collaborative funding efforts in light of individual institutions' fiscal situations.

To accomplish the objectives of the supplemental grant project, faculty from participating institutions designed strategies and assessment measures to increase students' "transfer success rate" by preparing test-taking exercises for potential transfer students. The exercises were intended to help prepare students for the exams they would be required to take upon transferring to SJSU. Test-taking exercises were prepared in the areas of business, calculus, writing skills, and entry-level mathematics. Faculty from the English departments at participating institutions also developed the content of the key language arts courses offered at SJCC, EVC, and SJSU, including laboratory curricula for pre-freshman composition courses, writing pedagogies, etc.

Project faculty also continued their examination of transfer students' performance in the English and mathematics sequences.

The supplemental grant to SJCC, EVC, and SJSU enabled the institutions to expand the original partnership project in two ways: First, language arts and mathematics faculty continued their collaboration in implementing exit standards, assessing transfer students' academic performance, tracking student progress, and developing curricula. Second, two symposia were held—one for mathematics faculty on "Effective Pathways into Mathematics and Science" and one for language arts faculty on college English entrance and exit standards, the history of freshman English, research findings, and "writing with a purpose." More than

100 faculty members from colleges and universities throughout California attended each symposium. As a result of the symposia, new curricula have been proposed, and the focus on removing barriers to successful transfer for underrepresented students has been increased.

TUCSON, ARIZONA

Pima County Community College District (PCCCD) and The University of Arizona (UA)

In a joint venture begun in September 1991, the Pima County Community College District and The University of Arizona designed, coordinated, and implemented a mentoring and instructional program, the Partnership to Aid and Retain Transfer Students (P.A.R.T.S.)—a partnership aimed at preparing minority PCCCD students to transfer to UA and facilitating the transfer process. Intended to help administrators and faculty enhance students' transfer opportunities, the grant supported efforts to improve academic support services, increase faculty-student interaction, offer supportive and accessible campus environments, and ensure cooperation between participating institutions. Specifically, P.A.R.T.S. objectives included:

- Instituting culturally relevant curriculum changes.
- Providing opportunities for student interaction with faculty mentors.
- Broadening minority transfer students' aspirations and academic experiences.
- Informing students about the transfer process.
- Preparing PCCCD students for UA's academic demands.
- Pairing participants with UA peer advisors.

Coordinators from both institutions believe the supplemental grant was invaluable in terms of enabling them to complete some of the objectives set forth in the partnership grant—including linking courses at both institutions in order to familiarize potential transfer students with UA faculty and to foster collaboration among PCCCD and UA faculty. Provisions for concurrent enrollment and faculty collaboration ultimately should increase the number of students transferring from PCCCD to UA and improve their academic performance at the senior institution.

OTHER PUBLICATIONS AVAILABLE FROM THE NATIONAL CENTER FOR ACADEMIC ACHIEVEMENT AND TRANSFER

At What Point Do Community College Students Transfer to Baccalaureate-Granting Institutions? Evidence from a 13-State Study

Faculty and Transfer: Academic Partnerships at Work

Financing Nontraditional Students: A Seminar Report

Probing the Community College Transfer Function

Setting the National Agenda: Academic Achievement and Transfer

AMERICAN COUNCIL ON EDUCATION

BEST COPY AVAILABLE

National Center for Academic Achievement and Transfer